

866-68

CLAIMS :

1. A cloned DNA which contains a DNA which is hybridizable with the genomic RNA of the LAV viruses or a fragment of said hybridizable DNA.
2. The DNA of claim 1 which is a recombinant of said hybridizable DNA or DNA fragment hybridizable with the genomic RNA of the LAV virus.
3. The DNA of claim 1 or 2 wherein said hybridizable DNA or DNA fragment is a cDNA.
4. The DNA of claims 1 to 3 which contains the following restriction sites in the following order (from the 3' end to the 5' end) :  
Hind III, Sac I, Bgl II (LAV 75).
5. The DNA of claim 4 which contains the following restriction sites in the following order :  
Hind III, Sac I, Bgl II, Bgl II, Kpn I (LAV 82).
6. The DNA of claim 4 which contains the following restriction sites in the following order :  
Hind III, Sac I, Bgl II, Bgl II, Kpn I, Xho I, Bam HI, Hind III, Bgl II (LAV 13).
7. The DNA of claim 6 which has a size of about 2.5 kb.
8. The DNA of any of claims 1 to 7 which contains a region corresponding to the R and U3 regions of the LTR as well as to the 3' end of the coding region of the retroviral DNA.
9. The DNA of claim 1 which has a size from about 9.1 to 9.2 kb.
10. The DNA of claim 9 which contains the following series of restriction sites :

Hind III	0
Sac I	50
Bam HI	460
Hind III	520
Bam HI	600
Pst I	800

	Hind III	1 100
	Bgl II	1 500
	Kpn I	3 500
	Kpn I	3 900
	Eco RI	4 100
5	Eco RI	5 300
	Sal I	5 500
	Kpn I	6 100
	Bgl II	6 500
	Bgl III	7 600
10	Hind III	7 850
	Bam HI	8 150
	Xho I	8 600
	Kpn I	8 700
	Bgl I	8 750
15	Bgl I	9 150
	Sac I	9 200
	Hind III	9 250

11. The DNA of claim 10 which contains an additional Hind III approximately at the 5 550 coordinate.

20 12. A DNA fragment according to claim 1 which comprises a sequence extending from approximately Kpn I (6100) to approximately Bam HI (8150) of the sequence defined in claim 11.

25 13. A DNA fragment according to claim 1 which comprises a sequence extending from approximately Kpn I (3500) to approximately Bgl II (6500) of the sequence defined in claim 11.

30 14. A DNA fragment according to claim 1 which comprises a sequence extending from approximately Pst (800) to approximately Kpn I (3500) of the sequence defined in claim 11.

15. A DNA fragment of claim 1 which codes for the envelope proteins.

35 16. A DNA fragment of claim 1 which codes for the retroviral polymerase.

(17) A DNA fragment which codes for the core proteins.

18. A probe for the in vitro detection of LAV which consists of a DNA according to any of claims 1 to 17.

5 19. An expression vector, particularly a plasmid, for the transformation of procaryotic or eucaryotic cells which contains an insert consisting of a DNA fragment hybridizable with the retroviral genome of LAV viruses as defined in any of claims 1 to 17.

10 20. The vector of claim 18 which contains the DNA fragment of claim 15.

15 21. A microorganism, eucaryotic or procaryotic cell which is transformed by a vector according to claim 19 or 20 and which expresses the polypeptide encoded by the corresponding DNA fragment.

(22) The purified RNAs of LAV viruses which have sizes from 9.1 to 9.2 kb.

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